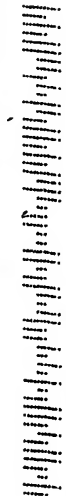


TC3700 DANIDOLDI



COMMUNICATIONS DIVISION

P.O. BOX 1450

ALEXANDRIA, VA 22313-1450

IF UNDELIVERABLE RETURN IN TEN DAYS

OFFICIAL BUSINESS

AN EQUAL OPPORTUNITY EMPLOYER



02 1A  
0004205065  
MAILED FROM ZIP CODE 22314

\$ 00.87<sup>0</sup>

APR 06 2006

RECEIVED  
APR 20 2006  
USPTO MAIL CENTER

BEST AVAILABLE COPY

A ☐ C ☐ S ☐  
☐ INSUFFICIENT ADDRESS  
☐ ATTEMPTED NOT KNOWN  
☐ NO SUCH NUMBER/ STREET  
☒ NOT DELIVERABLE AS ADDRESSED  
- UNABLE TO FORWARD

RTS  
RETURN TO SENDER



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/065,893	11/27/2002	John H. Jenkins	31-CD-5526	5294

23566 7590 04/06/2006

OSTRAGER CHONG & FLAHERTY LLP  
825 THIRD AVE  
30TH FLOOR  
NEW YORK, NY 10022-7519



EXAMINER

RAMIREZ, JOHN FERNANDO

ART UNIT	PAPER NUMBER
----------	--------------

3737

DATE MAILED: 04/06/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/065,893	<b>Applicant(s)</b> JENKINS, JOHN H.	
	<b>Examiner</b> John F. Ramirez	<b>Art Unit</b> 3737	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-37 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) \_\_\_\_ is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☒ Claim(s) 1-37 are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. ____.  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date ____.   | 6) <input type="checkbox"/> Other: ____.                                    |

## DETAILED ACTION

### *Election/Restrictions*

Restriction to one of the following inventions is required under 35 U.S.C. 121:

- I. Claims 1-17, drawn to a **method for synchronizing frames of imaging data with physiologic data**, comprising, *inter alia*, the following steps: (a) acquiring frames of imaging data representing a succession of images of a patient's heart during a study using an imaging system; (b) automatically time stamping each acquired frame with respective times generated by a first clock; (c) automatically determining respective offsets of said first clock relative to a reference clock for each time stamp associated with said acquired frames; (d) storing said acquired frames and said time stamps and said offsets associated with said acquired frames; (e) acquiring physiologic data from said patient during said study using a hemodynamic monitoring system; (f) automatically time stamping data in said acquired physiologic data representing one or more predetermined cardiac events with respective times generated by a second clock; (g) automatically determining respective offsets of said second clock relative to said reference clock for each time stamp associated with said physiologic data; and (h) storing said acquired physiologic data and said time stamps and said offsets associated with said acquired physiologic data, classified in class 382, subclass 128.

- II. Claims 18-23, drawn to a **cardiology analysis system** comprising, *inter alia*, an operator interface, a display monitor and a computer programmed to perform the following steps: **compensating for a lack of synchronism between a first clock used to time stamp a plurality of acquired frames of imaging data and a second clock used to time stamp acquired physiologic data representing predetermined cardiac events**; and selecting a first selected frame that was acquired at a time substantially the same as the time when a first predetermined cardiac event occurred based on the results of said compensating step, classified in class 600, subclass 413.
- III. Claims 24-35, drawn to a system comprising, *inter alia*, **an imaging system programmed to time stamp acquired frames of imaging data based on time measured by a first local clock**; a hemodynamic monitoring system programmed to time stamp acquired physiologic data corresponding to predetermined cardiac events based on time measured by a second local clock; and a first computer programmed to communicate reference clock time to said imaging system and to said hemodynamic monitoring system in accordance with a network time synchronization protocol, wherein said imaging system and said hemodynamic monitoring system are each further programmed to perform the following steps: **(a) calculating a respective link delay; (b) calculating a respective local**

**offset; and (c) associating each of said local offsets with a respective time stamp, classified in class 600, subclass 428.**

- IV. Claims 36-37, drawn to **a method for synchronizing a frame of imaging data with a physiologic datum**, comprising the following steps: (a) automatically determining a first offset of a first local clock relative to a reference clock, said first local clock dictating the time of day in an imaging system; (b) automatically adjusting said first local clock by an amount that is a function of said first offset to synchronize said first local clock with said reference clock; (c) automatically determining a second offset of a second local clock relative to said reference clock, said second local clock dictating the time of day in an hemodynamic monitoring system; (d) automatically adjusting said second local clock by an amount that is a function of said second offset to synchronize said second local clock with said reference clock; (e) acquiring a frame of imaging data representing an image of a patient's heart during a study using said imaging system; (f) automatically time stamping said acquired frame with a time generated by said adjusted first local clock; (g) storing said acquired frame and said time stamp associated with said acquired frame as an imaging file; (h) acquiring physiologic data from said patient during said study using said hemodynamic monitoring system; (i) automatically time stamping a datum in said acquired physiologic data representing a

predetermined cardiac event with a time generated by said adjusted second local clock; and (j) storing said acquired physiologic data and said time stamp associated with said acquired physiologic data as a physiology file, classified in class 382, subclass 128.

The inventions are distinct, each from the other because of the following reasons:

Inventions II and III are unrelated. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different designs, modes of operation, and effects (MPEP § 802.01 and § 806.06). In the instant case, the different inventions are not capable of use together and they have different modes of operation, and effects. For example, Group II is a cardiology analysis system that compensates for a lack of synchronism between a first clock used to time stamp a plurality of acquired frames of imaging data and a second clock used to time stamp acquired physiologic data representing predetermined cardiac events. However, Group III is an imaging system programmed to time stamp acquired frames of imaging data based on time measured by a first local clock.

Inventions [I, IV] and [II, III] are related as product and process of use. The inventions can be shown to be distinct if either or both of the following can be shown: (1) the process for using the product as claimed can be practiced with another materially different product or (2) the product as claimed can be used in a materially different process of using that product. See MPEP § 806.05(h). In the instant case the apparatus disclosed in Group III can be used with a materially different process, since

Art Unit: 3737

the methods disclosed in Groups I and IV do not address calculating a respective link delay and calculating a respective local offset, and concerning Group II, the Groups I and IV do not address compensating for a lack of synchronism between a first clock used to time stamp a plurality of acquired frames of imaging data and a second clock used to time stamp acquired physiologic data representing predetermined cardiac events.

Because these inventions are independent or distinct for the reasons given above and have acquired a separate status in the art in view of their different classification, restriction for examination purposes as indicated is proper.

Because these inventions are independent or distinct for the reasons given above and the inventions require a different field of search (see MPEP § 808.02), restriction for examination purposes as indicated is proper.

Applicant is advised that the reply to this requirement to be complete must include (i) an election of a species or invention to be examined even though the requirement be traversed (37 CFR 1.143) and (ii) identification of the claims encompassing the elected invention.

The election of an invention or species may be made with or without traverse. To reserve a right to petition, the election must be made with traverse. If the reply does not distinctly and specifically point out supposed errors in the restriction requirement, the election shall be treated as an election without traverse.

Should applicant traverse on the ground that the inventions or species are not patentably distinct, applicant should submit evidence or identify such evidence now of




record showing the inventions or species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John F. Ramirez whose telephone number is (571) 272-8685. The examiner can normally be reached on (Mon-Fri) 7:30 - 4:00 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian L. Casler can be reached on (571) 272-4956. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JFR  
03/23/06

  
BRIAN L. CASLER  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 3730